

## DOCUMENT RESUME

00192 - [A1051724]

[Improved Policies and Procedures for the Exploration and Development of Outer Continental Shelf Resources]. March 15, 1977. 10 pp. + 4 enclosures.

Testimony before the Senate Committee on Energy and Natural Resources; by J. Dexter Peach, Deputy Director, Energy and Minerals Div.

Contact: Energy and Minerals Div.

Budget Function: Natural Resources, Environment, and Energy: Energy (305).

Congressional Relevance: Senate Committee on Energy and Natural Resources.

A planned and systematic approach to the leasing of the Nation's Outer Continental Shelf (OCS) resources is needed if hydrocarbon production in frontier areas is to be maximized in a manner consistent with environmental and other values. A GAO assessment of the first frontier sale (OCS Sale 35 off the California coast) has demonstrated that (1) the Department of Interior's tract selection and evaluation process were not reliable; (2) the bidding generally was not competitive; and (3) the prelease tract evaluation used by the Department in making accept/reject decisions on industry bids were based on inadequate data. The need for sufficient data is critical not only for selecting and valuing tracts to determine the fair market value for leased lands, but also for identifying where to lease so that domestic oil and gas production can be increased in the near future. The Department should undertake a systematic exploration program to collect data on previously unexplored frontier areas. Such an exploration would also improve the Department's revenue-estimating process and provide the Nation with a better knowledge of the total OCS resource potential. The Department should also encourage private industry to conduct the drilling and share the resulting information with the Department on a confidential basis. The Department should offer for lease sale only those areas for which it has sufficient information to identify the resources' location, estimated value, and potential for development. (LDM)

00192

UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C.

FOR RELEASE ON DELIVERY  
EXPECTED AT 10 A.M. EST  
TUESDAY, MARCH 15, 1977

STATEMENT OF  
J. DEXTER PEACH  
DEPUTY DIRECTOR, ENERGY AND MINERALS DIVISION  
BEFORE  
COMMITTEE ON ENERGY AND NATURAL RESOURCES  
UNITED STATES SENATE

We appreciate this opportunity to discuss the need for improved policies and procedures for the rational exploration and development of our Outer Continental Shelf (OCS) resources. The Nation is placing great reliance on the OCS leasing program for increasing our domestic oil and gas production to meet near term energy needs. Decisions on where to lease and at what rate will have a significant impact on progress toward the goal of decreasing our reliance on foreign energy supplies.

We believe that there is a need for a planned and systematic approach to OCS leasing if hydrocarbon production in frontier areas is to be maximized in a manner consistent with environmental and other values. We have previously reported to the Congress in 1975 on the need for a more rational approach to OCS leasing and also on the need for adequate data to determine where and when to lease OCS resources. We have also undertaken a review which shows a need for more geological data for all energy resources including OCS oil and gas.

In this briefing, we will share with you the results of a recent GAO assessment of the first frontier sale--OCS Sale 35 off the California coast. We will relate the results of that effort to our previous studies of the OCS leasing program. 1/ Our most recent work focused on the tract selection and prelease evaluation procedures and how the development of budget revenue estimates were derived. It amply demonstrates that the problems we found in our earlier reviews have not been corrected. Our findings are relevant to certain key provisions of S. 9.

For OCS Sale #35 we found that the Department of the Interior's tract selection and evaluation process was not reliable and that bidding generally was not competitive.

Tracts were selected for leasing without obtaining adequate information to assess their resource potential and to meet the Department's then existing acreage goal of 10 million acres each year. Tracts believed to have little or no resource potential were added to the sale just to meet this former acreage goal. In this sale, 231 tracts were offered for lease. Of the tracts offered:

--55 percent were in water depths exceeding present technological capabilities to produce from platforms.

---

1/"Outlook for Federal Goals to Accelerate Leasing of Oil and Gas Resources on the Outer Continental Shelf," (RED-75-343, March 19, 1975; and "Outer Continental Shelf Oil and Gas Development--Improvements Needed in Determining Where to Lease and at What Dollar Value," (RED-75-359, June 30, 1975).

--22 percent were selected solely to meet an acreage goal, even though the Department believed that these tracts had little resource development potential.

--91 percent were rated "D" by the Geological Survey on a scale of "A" through "E". A "D" rating means inadequate data exists for determining resource potential. In later evaluations of these tracts, the presale values assigned by the Department indicated that 85 percent of the tracts contained either no resources or insufficient resources to make the tracts economically attractive.

Further, the prelease tract evaluation used by the Department in making accept/reject decisions on industry bids also were made using inadequate data. A comparison of presale tract values with the average accepted bids for "D" rated tracts showed a variance ranging from 400 to 1,800 percent. Consequently, decisions to lease tracts were not reliable and could not reasonably assure that the public received a fair market value return for the resources leased.

Prior to Sale #35, the Department estimated that two-thirds of the tracts offered would be leased. However, only 70 tracts out of the 231 offered, or about 30 percent, received bids and only 56, or about 24 percent, were eventually leased. The lack of competition and interest is further evidenced by the fact that 49 of the tracts bid on received only one or two bids.

The need for sufficient data is critical not only for selecting and valuing tracts to determine the fair market value for leased lands, but for identifying where to lease so that domestic oil and gas production can be increased in the near future. In spite of this need, the Department has been reluctant to undertake a systematic exploration program to collect data on previously unexplored frontier areas.

Another problem resulting from inadequate data is the lack of reasonable OCS revenue estimates for budget purposes. Revenues received from leases are deposited in the U.S. Treasury; consequently, the Government must predict how these sales will affect the Federal budget.

We found that the Department's current revenue estimating process for OCS sales is based on inadequate information, often includes overly optimistic estimates, and relies on various errors to cancel each other out and yield a "reasonable" estimate.

In Sale 35, the Department based its revenue prediction on a broad-brush, undetailed resource estimate for the sale area and an anticipated two-thirds leasing rate which did not materialize. This resulted in overestimating the results of Sale 35 by 5 times the actual bonus revenues received. Total revenues received were \$417 million as compared to the \$2.0 billion estimate used by OMB in the Federal budget.

Under the present leasing system, the Federal Government is frequently committed to lease before it has sufficient information to make intelligent choices. Authorizing the Secretary of the Interior to conduct a systematic exploration program, on a selective basis, will result in more informed resource development decisionmaking. Such a program would provide the Nation with a better knowledge of the total OCS resource potential. Accurate oil and gas reserve data is needed to assess how long we can continue to rely on these traditional energy sources and how fast we need to move to develop new and more extensive types of energy supplies. The issue of the accuracy of existing data is very controversial. A reasonable and systematic exploration program could play a key role in ending this controversy and give the Nation a better insight into OCS reserves and resources --the area which is now considered by many as the "last frontier" of domestic hydrocarbons.

It can also provide Interior with a basis for setting priorities among the areas available for leasing within a planned schedule of sales designed to minimize leasing of nonproductive or speculative areas and maximize the potential for rapid production.

It would give a better basis than now exists for evaluating resource development potential and potential environmental

impacts (both within and between geological areas) when considered in conjunction with the results of available environmental information involving the same geologic areas.

It would allow more reliable valuing of tracts to assure that the public receives a fair market value return for the lease offerings and aid in providing more reliable revenue estimates for budget purposes.

The kinds of data resulting from such a program would significantly help to appraise the worth of prospective leases. This is especially important in the present situation where the pressure is toward early development. As more and more acreage is offered with less and less reliable information about its potential resources, the conditions necessary to produce a truly competitive market tend to disappear and tend to encourage private speculation. As previously mentioned, 70 percent of the tracts bid on in Sale 35 got only one or two bids. As it becomes more and more difficult to rely upon competitive forces to insure protection of the public interest, it becomes increasingly imperative that the presale evaluations be as accurate as possible.

We recognize that many factors in the tract selection, valuation, and revenue estimation process cannot be quantified with certainty, but we believe that the Federal Government can and must do much more to improve the process. Some of the improvements we are proposing could also be expected to result

in more timely resource development. We are proposing the following actions.

--The Secretary of the Interior should direct a geological exploration program which would provide for the development and implementation of a systematic plan for appraising OCS oil and gas resources, including selected stratigraphic test drilling. The plan should identify the level of stratigraphic drilling necessary to provide a minimal level of data coverage for major OCS areas which would be necessary to protect the public interest.

--After the plan has been developed, the Department of the Interior should encourage private industry to conduct the drilling identified in the plan, subject to the developed information being shared with Interior on a confidential basis. Exploration permits issued by the Department for private drilling should provide the opportunity for any bonafied potential bidder to "buy-in" on the exploration by paying a pro-rata cost of the drilling.

After the extent of industry participation is known, if any data gaps still exist, the Department of the Interior should take the necessary actions, including public financing of stratigraphic drilling to obtain the needed data.



--In addition, after obtaining and evaluating the above information, the Department should take the necessary steps to encourage industry to obtain further information after the tract selection process is completed. These additional activities should focus on the specific tracts selected and help develop reasonably sound information for presale evaluation purposes. The results again should be shared with Interior on a confidential basis. Exploration permits issued by the Department for private drilling should provide the opportunity for any bonafied potential bidder to "buy-in" on the exploration by paying a pro-rata cost of the drilling.

After the extent of industry participation has been reviewed and evaluated by Interior, if any significant data gaps exist, the Department should take the necessary actions, including publicly financed stratigraphic drilling, to obtain data.

--The Department should offer for lease sale only those areas for which it has collected and analyzed sufficient information to adequately identify where the resource is, its estimated value, and its potential for development in the near future.

This proposal is very much in line with the thrust of S. 9, specifically Section 208 which provides for an OCS leasing program that will identify size, timing, and

location of leasing to meet national goals and to assure receipt of fair market value for the oil and gas owned by the Federal Government. We believe that such a leasing program will provide for the timely and orderly development of OCS resources.

Additionally, in a letter report (Attachment I), we recommended the Department review its policy of restricting on-structure exploratory drilling. This current policy is an important factor when considering the limited information available for the unleased and unexplored frontier lands and the importance of discovering and developing new domestic oil and gas. Conducting on-structure tests could provide better and more reliable data and result in fewer off-structure tests being needed.

Section 206 authorizes the Secretary of the Interior to seek applicants for exploratory drilling at least once in each frontier area. This would include core and test drilling for hydrocarbons in those areas and on geological structures which the Department considers as the best for hydrocarbon accumulation. We believe that the Secretary should encourage industry to the fullest extent possible to conduct this drilling. But, he also should be willing to have the Department undertake such drilling as may be necessary to provide the minimum resource information necessary for informed leasing decisions.

S. 9 provides the Secretary the necessary authority to do this and to develop the type of program that can identify the most promising geologic structures for lease.

Finally, although the Interior Department in commenting on a draft of our report on OCS Sale 35, objected to our recommendations, testimony by Secretary Andrus before the House Select Committee on the Outer Continental Shelf last week indicated a willingness by the new Administration to support OCS legislation which provides for an improved exploratory program.

Attachment II to this testimony contains our comments on a provision in S. 9 requiring action by the Comptroller General.

- - - - -

That concludes my prepared statement. We would be pleased to answer any questions.



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

ENERGY AND MINERALS  
DIVISION

MAR 7 1977

B-118670

The Honorable  
The Secretary of the Interior

Dear Mr. Secretary:

In recent years, the General Accounting Office (GAO) has conducted several reviews of the Department of the Interior's Outer Continental Shelf (OCS) oil and gas leasing program pointing out the need for a systematic exploration plan including selective stratigraphic drilling.

In a June 30, 1975, report, "Outer Continental Shelf Oil and Gas Development--Improvements Needed In Determining Where To Lease And At What Dollar Value," we pointed to numerous problems in selecting and leasing tracts caused by the absence of adequate resource information necessary to protect the public interest. We recommended that the Department develop and implement a systematic exploration plan, including selective stratigraphic test drilling for resource appraisal. The Department, in commenting on this report, said that GAO had not presented a critical analysis on the cost effectiveness of such a program and stated the key unanswered question is whether the cost of an exploration program would increase in equal amounts the return to the Treasury.

More recently, we conducted an assessment of OCS Sale #35 off the Southern California coast and found that the same problems continued to exist. In a draft report furnished the Department for comment we again recommended the Department direct a geological exploration program which would provide for the development and implementation of a systematic plan for appraising OCS oil and gas resources. The Department, in its February 24, 1977, comments on this draft report, reiterated the posture of the previous Administration that obtaining additional data would be costly and that GAO had not provided a benefit-cost analysis.

B-118678

We believe that a responsible cost-benefit analysis cannot be done until the Department develops an appraisal plan; identifies the levels of stratigraphic drilling needed to assess the OCS; and determines the extent to which private industry is willing to perform such drilling. The benefits of stratigraphic drilling, although difficult to quantify, could be measured, to some extent, by industry's willingness to undertake such efforts under a positive comprehensive program developed by the Department. In any case, we believe it is the Department's responsibility to make such assessments, including a cost-benefit analysis. The fact the Department has not chosen to do so, in no way negates our argument that such a program could be beneficial to the public interest. We believe there is compelling evidence, as discussed in our report on OCS Sale #35, that the present system is inadequate to protect the public's interest.

We might also add that the question of whether the Federal cost of an exploration program would exceed the return to the Treasury is not the only reason for having a systematic exploration program. Another benefit would be the timely and orderly development of OCS resources in meeting the national goal of increased domestic energy sources. We believe that any cost-benefit analysis should consider benefits to be derived other than those accruing directly to the Treasury.

Another major factor affecting the knowledge of an OCS area is the Department's policy on exploratory drilling on-structure. Current policy allows corehole and deep stratigraphic testing by industry off of the geologic structures identified by the seismic data, but prohibits such testing on-structure.

Survey officials said this policy was implemented because (1) of the possible environmental hazards of exploratory drilling on-structure and (2) unsuccessful testing would be likely to lower total bonus receipts. This policy, however, becomes an all important factor when considering the limited information available for the unleased and unexplored frontier lands and the importance of discovering and developing new domestic oil and gas. Conducting on-structure tests could provide better and more reliable data and result in fewer off-structure tests being needed.

B-118678

RECOMMENDATIONS

We recommend the Department promptly conduct any necessary cost-benefit analysis of a systematic exploration program. In conjunction with this analysis, we recommend that the policy restricting exploratory drilling on-structure be studied.

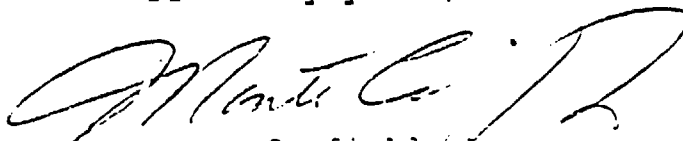
- - - - -

We would point out that no cost-benefit analysis can substitute for actual experience in the conduct of a federally developed exploratory program such as we have recommended in the Sale #35 report. We believe that the Department should initiate such a program now, conduct the cost-benefit studies simultaneously, and move expeditiously to answer unresolved questions based both on actual experience and studies. The evidence amassed over the past several years and presented in several GAO reports, including this most recent one clearly indicates to us, in any case, that a major change is in order, not just more study.

As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House and Senate Committees on Government Operations not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We would like to be informed of any action taken on our recommendations. If you wish, we would be glad to discuss this report with you or your staff.

Sincerely yours,



Monte Canfield, Jr.  
Director

GAO COMMENTS ON S. 9  
PROVISION WHICH REQUIRES ACTION  
BY THE COMPTROLLER GENERAL

A provision in S. 9 would assign certain functions to the Comptroller General.

Section 401(a) would require the Secretary to report annually on all shut-in oil and gas wells and wells flaring natural gas. The report must indicate the reason for the shut-in and flaring and actions the Secretary plans to take to require production or order cessation of the flaring. The Secretary would be required to submit the report to the Comptroller General.

Section 401(b) would require, within 6 months of receipt of the Secretary's report, the Comptroller General to review and evaluate the methodology used by the Secretary in allowing the wells to be shut-in or to flare natural gas. The Comptroller General would be required to report thereon to the Congress. We have no problem with the requirement as written.